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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/574,519 05/18/00 HENDERSON

E 454357-4

EXAMINER

025763 HM12/0416
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FREDMAN, J

ART UNIT

PAPER NUMBER

1655
DATE MAILED:

8
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/574,519

Applicant(s)
Henderson et al

Examiner
Jeffrey Fredman

Art Unit
1655



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 23, 2000
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above, claim(s) 1-55 and 66 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 56-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 56-65 are rejected under 35 U.S.C. 102(e) as being anticipated by Peeters (U.S. Patent 6,123,819).

Peeters teaches a molecular array comprising a) a surface (figure 2A and column 6) and b) at least one molecular deposition domain deposited on said surface wherein the spatial address of the domain is less than one micron in area (figure 2A and columns 5 and 6). In figure 2A, Peeters expressly shows a protein deposited onto a surface where the domain of deposition onto electrodes 26b and 26c are separated by 1 nanometer and where the electrodes range in size from 2 angstroms to 5 nanometers, which are two orders of magnitude smaller than a micron. Peeters expressly teaches that the domain is at a known location and can be high density (column 6, lines 36-42), that the array can be formed of Gold (column 5, lines 23-26) and can bind proteins or DNA (column 3, lines 49-51 and figure 2A) and that the array is composed of materials which are inherently either hydrophobic or hydrophilic, such as thiol groups, or gold or zinc oxide (column

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5). Peeters, in figure 2A, shows deposition domains which comprise spots, irregular shapes and in figure 4, regular shapes which form a line.

Response to Arguments

3. Applicant's arguments filed April 9, 2001 have been fully considered but they are not persuasive.

Applicant states that claims 55-66 were rejected under Peeters. Applicant is correct that the cover sheet incorrectly included claim 66, though the cover sheet does not, in fact, refer to claim 55. With regard to the rejection itself, on page 2 of the action, the rejection correctly rejects claims 56-65 and is proper.

Applicant argues that the product of Peeters differs from the claimed product because Peeters molecular deposition domain is not deposited on the surface, but is rather built by STM. This argument is not persuasive because a product by process claim is limited by the product itself. As MPEP 2113 notes "Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps." Here, the structure of Peeters meets the requirement of a molecular deposition domain wherein the spatial address of the domain is less than one micron in area, as expressly required by the claim. The process limitation of "deposited on said surface" is not a limitation on the claim as noted in the MPEP 2113. Further, as the court noted in *In re Thorpe, et al.* (CA FC) 227 USPQ 964 (11/21/1985), "If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is

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unpatentable even though the prior product was made by a different process.” Here, the products are identical as far as regards the limitations found in the claims.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

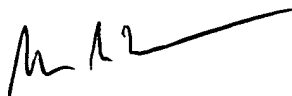
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Fredman, Ph.D. whose telephone number is (703) 308-6568.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (703) 308-1152.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

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Papers related to this application may be submitted to Group 1600 by facsimile transmission via the P.T.O. Fax Center located in Crystal Mall 1. The CM1 Fax Center numbers for Group 1600 are either (703) 305-3014 or (703) 308-4242. Please note that the faxing of such papers must conform with the Notice to Comply published in the Official Gazette, 1096 OG 30 (November 15, 1989).



Jeffrey Fredman
Primary Patent Examiner
Art Unit 1655

April 13, 2001